Ocean Summary

Wayne E. Esaias MODIS Science Team Meeting July 23, 2002

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Overall

- Reprocessing is going well, thanks to dedication of many people and organizations
 - 11 Months are complete
 1.8 TB/day
 - Validation of many products is progressing well
- Experience with Terra has really paid off with Aqua
 - L1 data very well behaved
 - Oceans global products produced within 24 hrs
 - But don't be fooled, validation still requires time.
- State of the Ocean Discipline is Strong

Highlights

- Terra SST is the best current IR SST product!
 - Aqua promises to be better.
 - CLIVAR/GODAE goals (0.1K) may be within reach.
- Calibration of Terra MODIS ocean visible has been an extreme challenge, but results are quite spectacular.
- Suite of MODIS ocean color products for research and evaluation, provide basis for improved science.
- Fluorescence data more sensitive than expected.
 - shown to be useful in case 2 waters.
 - Research progressing on global implications for physiological ecology

^{7/23/02} Impressive validation with independent AOL obervations³

Highlights (2)

- MOBY and MOCE nLw's are the world standard of reference for initialization of ocean color satellite data sets.
- Improved Coordination with SIMBIOS
 - Match ups with in-situ data from SeaBASS
 - Merged Terra Chlor_a_2 and SeaWiFS chlorophylls
 - Preparations for VIIRS/NPP
- NOAA near real time effort is bearing fruit
 - Something we can build upon for the VIIRS transition
- Use of high resolution bands for coastal regions.

Current Areas of Emphasis

- Terra Validation and Aqua Initialization
- Terra+Aqua Products
- Need continued focus on distribution, outreach.
- Recompetition changes.
- Validation everywhere, but esp in the Southern Ocean.
- Reprocessing effort is exemplary, but its still very hard. Collection 5 code must be ready in 9 mos.
- Need to increase effort for new and applications products.
 - Coastal, HABs, etc

Issues

- VIIRS instrument is promising for a follow-on
- Pathway to VIIRS Science Products (CDRs) not clear
 - Needs definition
 - Realistic, scientifically useful goals
 - Realistic funding

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